ond-order approach. **RESULTS:** Clinical success was 75.63% on tigecicline group, 41.45% on ceftriaxone/metronidazole group and 72.80% on ertapenem group. Cost per patient was always lower with tigecicline ($69,277.63USD) than ertapenem ($73,177.39USD) or ceftriaxone/metronidazole ($211,513.05USD) due lower hospital length of stay and complications; then tigecicline was the cost-saving alternative. The sensitivity analyses show the robustness of the model confirming tigecycline as the dominant alternative. **CONCLUSIONS:** Results show that tigecicline is cost-saving in the treatment of complicated intra-abdominal infections in Mexico and should be considered by clinicians and decision makers as a favorable option for this kind of infections.

PIN33

PHARMACOECONOMIC EVALUATION OF 13-VALENT PNEUMOCOCCAL CONJUGATE AND 23-VALENT PNEUMOCOCCAL POLYSACCHARIDE VACCINE IN CANADIAN ADULTS

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OBJECTIVES: In Canada, a 13-valent conjugate polysaccharide pneumococcal vaccine (PCV13) has recently been licensed for immunocompetent adults aged 50 years or older, as well as children over the age of 5. Currently, a 23-valent pneumococcal polysaccharide vaccine (PPV23) is recommended for high risk adults and all seniors. The health benefits and economic value of vaccinating Canadian adults with PCV 13 instead of PPV 23 is unknown. Compared to PCV13, PPV 23 covers 11 additional serotypes but may not be as effective for the 12 shared serotypes due to PCV13 being a conjugate vaccine as opposed to a polysaccharide. The objective is to develop a model that compares the health and economic consequences of PCV13 as compared to PPV23 in Canadian adults aged 50+. **METHODS:** We developed a base simulation model for an entire population of providing PCV13 to children less than 2 years of age and simulating the herd effects to the greater population. Vaccinating adults older than 50 years of age with either PCV13 or PPV23 was then compared to the base model, and the health and economic consequences examined across each scenario. Health impacts included invasive pneumococcal disease and pneumococcal related disease. Invasive disease is caused by Streptococcus Pneumococcal and is clinically presented as: meningitis, bacteremia and invasive pneumonia. Pneumococcal related disease is non invasive and has many different etiologies, the main clinical presentations include: otitis media (in base model for children only), and non-invasive pneumonia. Costs and QALYs were contrasted between the two adult vaccination strategies. **RESULTS:** Compared to PPV23, PCV13 was associated with 0.278more cases of invasive pneumonia, 0.061more cases of bacteremia, 0.002more cases of meningitis, and 27.997less cases of pneumococcal related disease per 100,000. Compared to PPV23, the incremental cost effectiveness ratio associated with PCV13 was $10,028 per additional QALY gained. **CONCLUSIONS:** Compared to PPV23, vaccinating adults with PCV13 is cost effective.

PIN34

ECONOMIC EVALUATION OF PNEUMOCOCCAL CONJUGATE VACCINES IN AN INFANT IMMUNIZATION PROGRAM IN ECUADOR

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OBJECTIVES: Vaccination is an effective method to reduce mortality and morbidity from pneumococcal disease. Three pneumococcal conjugate vaccines (PCVs) are currently available with varying serotype coverage (PCV-7, PCV-10, and PCV-13), therefore it is necessary to carefully evaluate and compare their potential public health and economic impacts before implementation. This study aims to estimate the cost-effectiveness of immunization strategies based on the PCVs currently available on the Ecuadorian market from a societal perspective. **METHODS:** A decision tree model was implemented to estimate the public health and economic impact of PCV use in a cohort of children younger than two years of age (lifetime horizon, discount rate: 3% annual). Alternatives strategies included: no vaccination (reference case) versus 7, 10, and 13 valent PCV's. The measures of effectiveness considered were: deaths avoided, life years gained (LYG) and quality adjusted life years (QALY's) gained. Effectiveness, utility, local epidemiology and cost of treating pneumococcal diseases were extracted from published sources and gray literature. **RESULTS:** All three immunization alternatives dominate the no vaccination scenario. Compared to no vaccination, PCV-13 is estimated to prevent 986 deaths, saving 29,410 LY's and 26,852 QALY's. This strategy represented cost savings of $550 per vaccinated child. The other two vaccination alternatives, PCV-7 and PCV-10, prevented 537 and 940 deaths; saved 15,865 and 28,129 LY's; saved 14,584 and 25,662 QALY's; and saved $255 and $527 per vaccinated child, respectively. These results are robust to variations in herd immunity, but sensitive to the prices of the vaccine per dose and the number of doses. **CONCLUSIONS:** In Ecuador, immunization strategies based on PCV 7, 10, and 13 valent vaccines would be cost saving interventions compared to no vaccination. The PCV-13 valent strategy dominates in terms of cost-effectiveness and cost-utility to PCV 7 and PCV10.

PIN35

DECISION ANALYSIS MODEL EVALUATING THE COST-EFFECTIVENESS OF FIDAXOMICIN AND VANCOMYCIN IN THE TREATMENT OF CLOSTRIDIUM DIFFICILE INFECTION (CDI) FROM A HOSPITAL PERSPECTIVE

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OBJECTIVES: This study compared the costs and effectiveness of fidaxomicin and vancomycin for the treatment of Clostridium difficile infection (CDI). This analysis was conducted from a hospital perspective to assist health-care providers in deciding whether to add fidaxomicin to their formularies. **METHODS:** A decision tree model examined whether fidaxomicin or vancomycin is more cost-effective for treating CDI. Outcomes data for this analysis were obtained from OPT-80-003 Clinical Study Group (fidaxomicin versus vancomycin) clinical trial. The main outcomes were: clinical cure which is resolution of symptoms, recurrence of CDI, and global cure which is clinical cure with no recurrence. Cost data were per CDI patient: 10 days hospitalization costs ($17,196), 10 days fidaxomicin regimen costs ($2,800), and 10 days vancomycin regimen costs ($26.8). **RESULTS:** The baseline cost effectiveness analysis found that fidaxomicin was slightly more effective but more costly than vancomycin. That means that a hospital would pay an extra $31,539 if fidaxomicin were chosen to treat each episode of CDI. The model is most sensitive to hospitalization costs, which is coherent with the literature. A one-way sensitivity analysis on drug cost found that fidaxomicin did not dominate whatever the cost was. A two-way sensitivity analysis on hospitalization cost and the clinical cure rate of fidaxomicin found that vancomycin was only dominated when fidaxomicin cure rates reached 97%, and this is highly unlikely. **CONCLUSIONS:** Based upon this analysis, vancomycin is the recommended drug of choice for CDI treatment. The hospital would pay an extra $31,539 to treat each episode of CDI using fidaxomicin. Fidaxomicin would only be preferred if it had a higher clinical cure rate and a cheaper price according to the sensitivity analysis. As a conclusion, hospitals could consider fidaxomicin as second line treatment for cases in which patients have failed a course of treatment with vancomycin.

PIN36

COST-EFFECTIVENESS ANALYSIS OF VORICONAZOLE VERSUS AMPHOTERICIN B DEOXYCHOLATE IN THE TREATMENT OF INVASIVE PULMONARY ASPERGILLOSIS IN COLOMBIA

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OBJECTIVES: Invasive pulmonary aspergillosis (IPA) is a disease that affects immunocompromised patients and is the major cause of death related to infections in patients with acute leukemia and recipients of bone marrow transplant. Furthermore, is also the most prevalent within the spectrum of invasive aspergillosis. The aim of this study was to perform a cost-effectiveness analysis of voriconazole compared to amphotericin B deoxycholate in the treatment of IPA in immunocompromised adults' patients in Colombia from the third-party payer perspective. **METHODS:** A decision-tree model was developed to determine the cost-effectiveness of voriconazole in patients with probable or confirmed IPA, using a time horizon of 12 weeks. Comparators were: voriconazole (IV 6.6 mg/kg/day) and amphotericin B deoxycholate (1mg/kg/day) administered for 10 days at the end of which was decided if they needed to switch to oral therapy (voriconazole VO 400mg/day) or to another drug (caspofungin 50mg/day). Clinical efficacy was obtained through a systematic literature review of published clinical trials. Medical costs were gathered from Colombian price manual SOAT; drug costs were retrieved from official report SISMED and by Law 3470/2011 in Colombia. Costs considered were: drugs, hospitalization, and medical manage associated with adverse events (liver enzyme abnormalities or renal failure). Effectiveness measure was life-years gained (LYG). Incremental Cost-Effectiveness ratio (ICER) and sensitivity analyses for key variables were performed to test model robustness. Results were expressed in 2011 US$. **RESULTS:** The model reveal an increase of LYGs with voriconazole against amphotericin B (1.61 vs. 0.64), and higher costs per patient with voriconazole (US$5,225) compared to amphotericin B (US$4,577), with an ICER of US$968.69/LYG. Likewise, amphotericin B exhibited higher likelihood of developing nephrotoxicity (0.1780 vs. 0.481) and treatment failure (0.4660 vs. 0.3221) in comparison to voriconazole. **CONCLUSIONS:** The economic assessment indicates that voriconazole was the cost-effectiveness therapy for the treatment of immunocompromised Colombian adult patients with IPA.

PIN37

COST-EFFECTIVENESS OF TREATMENT INITIATION WITH RITONAVIR-BOOSTED ATAZANAVIR (ATV/R) AND LOPINAVIR (LPV/R) IN TREATMENT-NAÏVE HIV PATIENTS AT DIFFERENT CD4 LEVELS AT BASELINE

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OBJECTIVES: Portuguese guidelines for treatment of antiretroviral (ARV) therapy-naïve HIV-patients include the use of combination ARV regimens with ≥ three drugs, such as two nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs) and a ritonavir-boosted protease inhibitor. Ritonavir-boosted atazanavir (ATV/r) and lopinavir (LPV/r) are among recommended first-line therapies. This study compared lifetime clinical benefits and cost-effectiveness of ARV therapy with ATV/r or LPV/r in treatment-naïve HIV patients at different baseline CD4 levels from the Portuguese National Healthcare System perspective. **METHODS:** A microsimulation model compared the average patient population of the CASTLE trial, treated with either ATV/r or LPV/r (median CD4 level 205 cells/m^3), with the subgroup of patients with a CD4 level of ≥200 cells/m^3 when enrolled in the trial. Virological response was modelled as reduction in viral-load (<50 copies/ml), impacting CD4+ cell count as well as risk of AIDS Defining Events (ADEs) and cardiovascular events. Both treatment-specific adverse events (AE) and long-term toxicities were included. Relative drug efficacy and AEs were based on data from the CASTLE study;